



In the Claims

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GROUP 1700

Please SUBSTITUTE the following amended claims for the pending claims with the same number (a marked up copy of the prior pending claim with all changes shown is supplied in the appendix):

1. (Twice Amended) A method of processing a wafer having a process side and a back side, comprising:

removing un-wanted particles from the back side of the wafer in order to maintain the desired relationship between the backside of the wafer and a chucking surface;

placing the wafer on a chucking surface after removing the unwanted particles from the back side of the wafer;

etching the process side of the wafer after placing the wafer on the chucking surface and without performing any intervening processing steps between the etching and removal steps.

5. (Twice Amended) A method of processing a wafer having a process side and a backside opposite the process side, the method comprising:

providing a semi-dry cleaning module for cleaning the backside of the wafer and a processing module for performing a processing task on the process side of the wafer;

receiving the wafer for processing;

loading the wafer into the cleaning module;

cleaning the backside of the wafer in the semi-dry cleaning module to remove particles therefrom, wherein only the backside of the wafer is cleaned in the semi dry cleaning module so as not to damage the process side of the wafer;

transferring the wafer to the processing module;

loading the wafer into the processing module; and

etching the process side of the wafer in the processing module without performing any intervening processing steps between the steps of cleaning the backside of the wafer and etching the process side of the wafer.

21. (Once Amended) A method of processing a wafer having a process side and a backside opposite the process side, the method comprising:

providing a cleaning module for cleaning the backside of the wafer and a plasma reactor for performing an etching task on the process side of the wafer, the plasma reactor having a

process chamber within which a plasma is formed for the processing task and a chuck for supporting the wafer during the processing task, the chuck being disposed inside the process chamber, the chuck including a heat transfer system;

cleaning the backside of the wafer in the cleaning module to remove particles therefrom, wherein only the backside is cleaned so as not to damage the process side of the wafer;

removing the wafer from the cleaning module and thereafter introducing the wafer into the process chamber of the plasma reactor without performing any intervening processing steps therebetween;

placing the wafer on the chuck; and

holding the backside of the wafer relative to a top surface of the chuck with an electrostatic force, the cleaned backside of the wafer preventing undesirable gaps from forming between the backside of the wafer and the top surface of the chuck;

performing the etching task with the plasma on the process side of the wafer in the process chamber of the plasma reactor; and

distributing a heat transfer gas to the backside of the wafer via the heat transfer system during the etching task, the cleaned backside of the wafer reducing heat transfer gas faults caused by undesirable gaps.